

**NHDOT Division of Operations
EIP-14-Form 14c**

Audit Follow-up, Implementation Action Plan

Bureau/District: Highway Maintenance

Date: 6/6/12

EMS Audit Compliance Audit Scope of Audit: Bureau-wide

Finding No.	Finding Description	Recommendation	Actions and Specific Deliverables Necessary to Ensure Implementation	Lead Person	Target Completion Date
EIP-1 Environmental Policy					
1-3	<p>Management Commitments are stated in Department EMS Policy included in the EMS Manual. The Bureau has adapted the EMS template language provided by the NHDOT EMS Manual within the EIP Responsibilities sections to reflect that the responsible party will “advocate: for certain activities, rather than “assure” that certain activities are performed. Bureau staff indicated that the language adaptation was intentional and reflected the level of work commitment that the Administrators thought was appropriate. As a result, a clear commitment statement from the Bureau is recommended.</p>	<p>Recommend requiring a clear commitment statement from the Bureau in order to ensure the appropriated level of Bureau Management commitment to the EMS.</p>	<p>Prepare commitment statement</p>	<p>EMS Team</p>	<p>10/11 Completed 10/31/11</p>

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1-5	Training on EMS Policy was provided to all employees at annual training in 2010; however, training has not been provided to contractors. GZA audit interviews revealed that the understanding of the EMS policy decreased in accordance with the Bureau's organizational structure. For example, a Highway Maintainer II was less likely to accurately describe the intent and scope of the EMS policy than a Maintenance Supervisor.	Recommend modifying procedures to ensure that communications and training are being provided promptly and effectively. Conduct additional training on EMS to ensure personnel are familiar with basic concepts.	Revise EIP-6-Form 6A and EIP-7-Form 7A. Identify training required and proceed with implementation of training	MK	10/11 Completed 10/31/11
EIP-2 Identifying Environmental Aspects and Impacts					
2-8	"Fenceline" approach has been applied to determine applicable aspects. However, specifications are provided to paint vendors to ensure that only lead and RCRA metal free paints are supplied to NHDOT.	Recommend documenting the direct or indirect aspects of contractors within the scope of the EMS.	Direct and indirect aspects of contractors are included in completed EIP-2-Form 2c. Revise EIP-2 to reflect clarify contractors/vendors EMS responsibilities.	EMS Team	12/11 Completed 10/31/11
2-11	Program to control all significant environmental aspects and impacts has not been fully implemented.	Finish developing the EAPs and implement them consistently across the Districts.	Finish 1 st 6 EAPS Implement/Train	EMS Team	3/12 6/12
EIP-3 Legal and Other Requirements					
3-3	Regulations are available on the website. EIP-3-Form 3b is not complete at the Bureau or District Level. District Offices maintain copies of required permits, licenses and authorization; however, there was inconsistency of availability of that information at the patrol sheds.	Complete the Environmental Permits, Licenses and Authorizations Registers (EIP-3-Form 3b) for all Districts	Complete EIP-3-Form 3b	EMS Team	12/11 Completed Master Form 3b 10/31/11

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3-4	Sustained interaction between agencies is documented; however, ensuring sustained interaction with contractors regarding environmental requirements and regulatory compliance is not stated in the procedure.	Revise procedure to clarify how contractors are to be addressed under the EMS.	Contractor interaction to be addressed under EIP-6 and EIP-7. Revise EIP-3 to clarify contractor/vendor interaction. Contractor checklist to be added to "Document and Records" section of EIP-3.	EMS team	12/11 Completed 10/31/11
3-5	Sustained interaction between agencies is documented; however, contractor interaction regarding other commitments and agreements is not stated in the procedure.	Revise procedure to clarify how contractors are to be addressed under the EMS.	Contractor interaction to be addressed under EIP-6 and EIP-7. Revise EIP-3 to clarify contractor/vendor interaction. . Contractor checklist to be added to "Document and Records" section of EIP-3.	EMS team	12/11 Completed 10/31/11
EIP-4 & 5 Setting Objectives and Targets					
4/5-3	Timeframes for objectives and targets not specified. Not all targets are measurable.	Recommend developing objectives and targets in accordance with the stated procedure.	Continue to develop existing EAPs and implement in accordance with training program. Revisit target measures and specify time frames.	EMS Team	2/2012 Completed 3/13/12
4/5-6	Selection criteria to determine what significant environmental aspects become objectives and targets are generally outlined in the EIP Procedure; however, documentation of the specific criteria used to select the objectives and targets is not included in the EMS Manual. GZA's interviews of the District EMS Team members indicated that the selection process was, to a certain extent, subjective.	Recommend documenting in the EMS Manual the criteria for selecting those activities/aspects to be included in the Environmental Action Plan.	Revise EIP-4 to clarify selection of goals and objectives. Document activity/aspect selection criteria in EMS Manual.	EMS Team	10/11 Completed 10/31/11
4/5-7	EAPs for the achievement of environmental objectives and targets have been established; however, none of the EAPs have been fully implemented.	Recommend evaluating the EIP-5 Procedure regarding the development and execution of EAPs, and that the EMS Team evaluates all EAPs to ensure they are appropriate.	Revise EIP-5 to verify that EAPs selected are appropriate. Document activity/aspect selection criteria in EMS Manual.	EMS Team	10/11 Completed 10/31/11

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4/5-8	Responsibilities for EAPs at every level should be more clearly defined.	Recommend including employee's responsibility to comply with work instructions. Recommend revising the EAP table to clearly define the responsibilities of all NHDOT employees relative to each EAP.	Revise EIP-5-Form 5a to define EAP roles, responsibilities, and accountabilities.	EMS Team	10/11 Completed 10/31/11
4/5-9	Responsibilities at every level should be more clearly defined. Responsibilities are specific to team members and administrative staff only. Recommendation to include the responsibilities of employees to comply with work instructions, etc. Communication/Implementation deadlines for several EAPs were to start January 2011. Recommendation to revise schedule for action items that have not yet been achieved.	Recommend developing and documenting a process for reviewing current EAPs and for developing future EAPs to ensure continued environmental performance improvement.	Process for reviewing EAPs is in EIP-5, step 6.	EMS Team	Completed 10/31/11
EIP-6 Organization, Personnel, Accountability and Responsibility					
6-2	Form 6a is not complete and, therefore, responsibilities for environmental management and regulatory compliance have not been defined and documented for the Bureau. However, because responsibilities are documented in the procedure and the EMS is being implemented, GZA provided a score of 3.	Recommend completing the Environmental Organizational Chart and Roles, Responsibilities, and Accountabilities table (EIP-6-Form 6a).	Update EIP-6-Form 6a to include all Bureau staff positions roles, responsibilities, and accountabilities	EMS Team	12/11 Completed 10/31/11

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6-3	Bureau has adapted the language in the procedure to be more reflective, from their view, of the role that the Bureau plays regarding disciplinary action, etc.	Recommend re-evaluating Bureau Management's position regarding disciplinary action to be consistent with the understanding of field-level employees and the Department's overall environmental stewardship and compliance requirements.	Non-compliance language will be included in EIP-6.	EMS Team	10/11 Completed 10/31/11
6-6	Responsibilities of the EMS Coordinator and Team have not been defined specific to the Bureau.	Recommend identifying EMS Team members with contact information that is available to all employees.	Develop EMS Team contact list and distribute to all Bureau locations	EMS Team	9/11 Completed 10/31/11
EIP-7 Competence, Training, and Awareness					
7-1	The Bureau utilizes the NHDOT training matrix that is set-up by position title and operates on a 6-year training cycle ending in 2013 with initial and refresher training identified. EIP-7-Form 7a identifies EMS related training requirements. Form does not include all EMS and environmental compliance training (tailgate safety training) that is provided to employees at a District level. GZA reviewed the training matrix and training record at the District level.	Recommend revising the current training matrix (EIP-7-Form 7a) to include all EMS training and frequency.	Revise EIP-7-Form 7 a to include all EMS training	EMS Team	10/11 Completed 10/31/11
7-2	With regard to assuring that all required training is scheduled and given – two separate methods have been developed to provide training to employees. The NHDOT training matrix does not currently include EMS training, which must be tracked separately. GZA reviewed the training matrix and training records at the District level.	Recommend revising the current training matrix (EIP-7-Form 7a) to include all EMS training and frequency.	Revise EIP-7-Form 7 a to include all EMS training	EMS Team	10/11 Completed 10/31/11

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7-4	Bureau administrators stated that the consequences of deviating from Standard Operating Procedures, work instructions, regulatory requirements, and EMS procedures are included in the training. Audit results of patrol sheds revealed that consequences of deviating from EMS procedures were not well defined by the Bureau and not well understood by personnel.	Recommend developing and implementing the plan described in EIP-7 to assess employee competence.	Develop plan with evaluation criteria to assess the EMS competence, frequency of EMS training and consequences of EMS incompetence of employees.	EMS Team	3/2012 Completed 6/6/12
7-5	With regard to assuring awareness of the Environmental Policy, actual and potential impacts related to their work, and their EMS responsibilities – the procedure ensures that personnel are aware of EMS policy. GZA did not interview any contractors. The Bureau reported that contractors are not likely to be aware of the Environmental Policy specifically, but are made aware of environmental requirements.	Revise procedure to clarify how contractors are to be addressed under the EMS.	Contractor requirements will be included in EIP-6 and EIP-7. Future Bureau originated contracts will include EMS information. Future State originated contracts will include EMS information when possible.	EMS Team	3/2012 Department wide issue may impact completion date. Completed 10/31/11
EIP-8 Internal and External Communication and Reporting					
8-1	A procedure for communicating environmental issues, regulatory requirements, and EMS matters within and between various levels of the organization has been established under EIP and communication is occurring; however, documentation within the EMS has not been provided.	Complete and implement the procedure; document it in the EMS Manual.	Develop internal EMS communication plan and documentation procedure.	EMS Team	3/2012 Complete 4/10/12

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8-3	Procedure to ensure that suppliers and contractors are aware of the relevant requirements of the organization's EMS and regulatory requirements is stated in the EIP and contracts include language specific for environmental regulatory compliance; however, there is no EMS documentation to this effect included in the manual.	Revise procedure to clarify how contractors are to be addressed under the EMS.	Develop external EMS communication plan and documentation procedure to track public inquiries and communications with vendors and contractors.	EMS Team	3/2012 Department wide issue may impact completion date. completed 4/10/12
8-4	A method to receive and address environmental concerns of employees, suppliers, and contractors is in place; however, documentation is not provided.	Recommend documenting all methods of communication within the EMS Manual and review the effectiveness of each strategy in communicating the essential information to the appropriate personnel.	Develop procedure to receive EMS concerns and provided feedback and include in EIP-8-Form 8a, Communication Plan Matrix.	EMS Team	3/2012 completed 4/10/12
8-5	Documentation of external communications pertaining to complaints that come in through the Public Information Officer (PIO) is logged into an electronic system; however, this is not specified in the external communications log.	Recommend documenting all methods of communication within the EMS Manual and review the effectiveness of each strategy in communicating the essential information to the appropriate personnel.	Complete EIP-8-Form 8a and distribute to appropriate staff and locations. Maintain and update EIP-8_Form-8b as necessary.	EMS Team	3/2012 completed 4/10/12
8-6	With regard to documenting internal and external communication activities – documentation of EMS awareness training was provided and there is an electronic system through PIO to log external communications; however, EMS forms are not being utilized.	Utilize the forms for documenting internal and external communication activities (EIP-8-Form 8a and 8b).	Complete EIP-8-Form 8a and distribute to appropriate staff and locations. Maintain and update EIP-8_Form-8b as necessary.	EMS Team	3/2012 completed 4/10/12
EIP-9 Documentation, Document Control, and Records Management					
9-1	Core elements of the EMS have been developed; however, not all of the documentation of the elements has been included.	Recommend fully documenting all EMS elements within the EMS Manual.	Update EIPs, complete forms, continue the process and procedures and document in EMS Manual.	EMS Team	3/2012 completed 4/10/12, Ongoing

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9-3	5 out of 11 core elements listed were fully documented to the extent that they have been completed. Operational controls, responsibilities, training, communication and monitoring have not been fully documented to the extent that these elements have been implemented.	Recommend fully documenting all EMS elements within the EMS Manual.	Identify key EMS records to be maintained and document in EMS Manual. Update EIP-9-Form 9a	EMS Team	4/2012 completed 4/10/12
9-8	With regard to the availability of current versions of all required documents at all essential locations – EMS manual maintained by EMS Coordinator has current versions and there are electric versions available on G-drive. There is inconsistency in the type and amount of information that has been provided and is expected to be maintained at the patrol sheds across Districts.	Recommend the EMS Team determine what information is appropriated and useful at the patrol sheds and uniformly distribute and maintain that information at the sheds.	Develop EMS information distribution plan and EMS data collection and filing. Distribute plan and required materials.	EMS Team	5/2012 completed 4/10/12
9-10	With regard to a procedure to identify and manage EMS and regulatory compliance records – the IMP database is utilized to maintain regulatory compliance records; however, this is not documented in the log form. Form 9a is being utilized for EMS documents.	Recommend listing the types of environmental records kept in the IMP database (and their retention times) in the Environmental Records Log (EIP-9-Form 9b). Recommend documenting the location of appropriate environmental/EMS documents in the Environmental Documents Log (EIP-9-Form 9a).	List types of records maintained in IMP in EIP-9-Form9b and document the location of EMS documents in EIP-9-Form 9a.	EMS Team	6/2012 completed 4/10/12
9-12	Record retention times were reported to be specified on the IMP database, but not documented in EMS.	Same as Finding 9-10.	List EMS records maintained in IMP and document the location of EMS documents in EIP-9-Form 9b.	EMS Team	6/2012 completed 4/10/12
9-14	A master list of all environmental records is located in IMP, not in EMS Manual.	Same as Finding 9-10.	List EMS records maintained in IMP and document the location of EMS documents in EIP-9-Form 9b.	EMS Team	6/2012 completed 4/10/12

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9-15	IMP is the data management system that is utilized for tracking environmental data, but it is not specified in EMS.	Same as Finding 9-10.	List EMS records maintained in IMP and document the location of EMS documents in EIP-9-Form 9b.	EMS Team	6/2012 completed 4/10/12
EIP-10 Monitoring and Measurement					
10-1	A procedure to identify and monitor the key characteristics of operations having significant aspects and impacts has been established and implemented to identify and monitor key characteristics of operations. EIP-10-Form 10a is incomplete. Based on GZA audits, additional monitoring methods include Veeder-root analyses and results of compliance audits.	Identify all appropriate performance indicators and include in the Monitoring and Measurement Matrix (EIP-10-Form 10a).	Develop list of all performance monitoring indicators and update EIP-10-Form 10a.	EMS Team	3/2012 completed 4/10/12
10-3	Some performance indicators related to objectives and targets are specified on EIP-10-Form 10a, but do not include a monitoring method for all activities. Identified performance indicators are related to objectives, but not targets.	Identify all appropriate performance indicators and include in the Monitoring and Measurement Matrix (EIP-10-Form 10a).	Develop list of all performance monitoring indicators and update EIP-10-Form 10a.	EMS Team	3/2012 completed 4/10/12
EIP-11 Operational Controls					
11-1	Procedure to identify and control activities associated with significant environmental aspects, environmental policy, objectives and targets, and regulatory requirements has been developed and implemented regarding UST and facility inspections. Not all of the operational controls for EAPs have been implemented to date.	Recommend completing EAPs and conducting training required to implement operational controls.	Develop list of all operation controls. Update EIP-11-Form 11a.	EMS Team	3/2012 completed 4/10/12

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11-3	With regard to considering activities processes, and emergency situations with significant environmental aspects – the Bureau has not completed Operational Controls Matrix.	Recommend documenting existing operational controls in the Operational Controls Matrix (EIP-11-Form 11a). Add additional operational controls as the EAPs are developed.	Complete EIP-11-Form 11a and update as appropriate	EMS Team	3/2012 completed 4/10/12, ongoing
11-4	With regard to evaluating the effectiveness of standard operating procedures, work instructions, and physical controls to prevent adverse environmental impacts and to achieve objectives and targets – the Bureau has not completed Operational Controls Matrix.	Recommend documenting existing operational controls in the Operational Controls Matrix (EIP-11-Form 11a). Add additional operational controls as the EAPs are developed.	Complete EIP-11-Form 11a and update as appropriate	EMS Team	3/2012 completed 4/10/12, ongoing
11-5	With regard to effectively communicating standard operating procedures and work instructions to all employees who would use them – the Bureau has not completed Operational Controls Matrix.	Recommend documenting existing operational controls in the Operational Controls Matrix (EIP-11-Form 11a). Add additional operational controls as the EAPs are developed.	Complete EIP-11-Form 11a and update as appropriate	EMS Team	3/2012 completed 4/10/12, ongoing
11-6	With regard to already implemented controls – EMS Work Instruction is listed on Master List in EMS; however, Bureau has many BMPs that were in place prior to EMS implementation that are not included in a master list format (e.g. BMPs for roadway maintenance activities).	Include appropriate Standard Operating Procedures, Work Instructions, and other available controls in EMS Manual, where appropriate.	Develop list of all existing documents that relate to EMS. Include appropriate references in work instructions. Include in EMS manual as EMS team determines	EMS Team	4/2012 completed 4/10/12, ongoing
EIP-12 Emergency Preparedness and Response					
12-1	EIP procedure to identify the potential for and responses to accidents and emergencies has been established, but has not been implemented and maintained.	Recommend documenting existing procedures and listing emergency action plans in the EMS Manual for future evaluation and improvement.	Develop list of existing emergency procedures and action plans. Complete EIP-12-Form 12a and update as appropriate.	EMS Team	3/2012 completed 4/10/12

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12-2	With regard to establishing procedures to prevent and mitigate environmental impacts of accidents and emergencies – Patrol sheds had emergency contact lists and evacuation plans posted. Training records documenting emergency preparedness training were provided. Employees demonstrated a basic level of competency in the event of an emergency. None of these elements are documented in EMS.	Recommend documenting existing procedures and listing emergency action plans in the EMS Manual for future evaluation and improvement.	Develop list of existing emergency procedures and action plans. Complete EIP-12-Form 12a and update as appropriate.	EMS Team	3/2012 completed 4/10/12
12-3	With regard to defining emergency plans and procedures to ensure that environmental impacts of accidents and emergency situations are mitigated – Emergency procedures provide phone contacts for emergency services and the District Office. The District Office is responsible for handling dispatch of additional emergency services and conducting notifications. None of these elements are documented in EMS.	Recommend documenting existing procedures and listing emergency action plans in the EMS Manual for future evaluation and improvement.	Develop list of existing emergency procedures and action plans. Complete EIP-12-Form 12a and update as appropriate.	EMS Team	3/2012 completed 4/10/12
12-5	With regard to testing emergency procedures and conducting emergency drills – Districts reported drills are not conducted.	Recommend incorporating emergency planning and drills into training in order to evaluate competency of employees and identify emergency planning deficiencies.	Implement emergency planning and drills into training program. Document drills in EIP-12-Form 12b	EMS Team	3/2012 completed 4/10/12, ongoing
12-6	Employees are trained on emergency procedures as evidenced by training matrix and available records. The content of that training was outside the scope of the audit because EIP-12-Form 12a was not complete.	Recommend documenting existing procedures and listing emergency action plans in the EMS Manual for future evaluation and improvement.	Develop list of existing emergency procedures and action plans. Complete EIP-12-Form 12a and update as appropriate.	EMS Team	3/2012 completed 4/10/12

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12-7	A master list of emergency plans and procedures was not provided.	Recommend documenting existing procedures and listing emergency action plans in the EMS Manual for future evaluation and improvement.	Develop list of existing emergency procedures and action plans. Complete EIP-12-Form 12a and update as appropriate.	EMS Team	3/2012 completed 4/10/12
EIP-15 Compliance Evaluation					
15-1	Compliance evaluation procedure has been established. Bureau participates in peer review every 3 rd year and has done so for 10 years. OSC is determining the best method to assess compliance across the Department.	Recommend documenting existing practices within the EMS Manual until the OSC provides an alternative program.	Develop list of existing compliance evaluation tools and frequency of compliance evaluations. Update associated forms and include in EIP-15.	EMS Team	4/2012 Completed 6/6/12
EIP-16 Management Review					
16-2	Initial management review was focused on the status of EMS implementation and did not include an assessment of the EMS elements.	Recommend fully implementing the Management Review after the current EMS Evaluation is completed. (This recommendation was made even though all checklist items related to EIP-16 achieved a score of 5.)	Continue to provide annual EMS management reviews.	EMS team	Annual basis, ongoing